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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Sajeev Madhavan

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FORT COLLINS, CO 80527-2400

EXAMINER

DAILEY, THOMAS J

ART UNIT

PAPER NUMBER

2152

NOTIFICATION DATE

DELIVERY MODE

03/11/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/635,741	Applicant(s) MADHAVAN, SAJEEV	
	Examiner THOMAS J. DAILEY	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-16,18-25 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-16, 18-25, and 27-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-2, 4-16, 18-25, and 27-30 are pending.
2. In view of the appeal brief filed on December 5, 2007, PROSECUTION IS
HEREBY REOPENED. New grounds of rejection are set forth below. To avoid
abandonment of the application, appellant must exercise one of the following two
options:
 - (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or
a reply under 37 CFR 1.113 (if this Office action is final); or,
 - (2) initiate a new appeal by filing a notice of appeal under 37 CFR
41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid
notice of appeal fee and appeal brief fee can be applied to the new appeal, If,
however, the appeal fees set forth in 37 CFR 41.20 have been increased
since they were previously paid, then appellant must pay the difference
between the increased fees and the amount previously paid.
3. A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by
signing below:

/Bunjod Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2152

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims rejected 1-2, 4-16, 18-25, and 27-30 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for certain interpretations, does not reasonably provide enablement for the broadest reasonable interpretation of the claims.
6. Claims 1, 15, and 22 recite, "wherein said free computing resources comprises resources that are not preconfigured for use in said computing system" (e.g. claim 1, line 11). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope of this limitation. Specifically, the specification recites, "A pool of free-computing resources 304, as described herein is a collection of computing resources that are representative of the computing resources in the operating computing resource pool 301 and are available for configuration for use in the operating computing pool 301, but which are not configured for any specific application in the operating computing

resource pool 301 until a specific need arises." Thus resources "not preconfigured" are only not preconfigured in the sense that they are not configured for operation for a specific application; this is not what the claims recite. Resources "not configured for use in said computing system" can reasonably interpreted as resources that cannot communicate with the computing system (communicating being "use"), but such an interpretation is not enabled by the specification, and the examiner believes cannot be enabled, given the rest of the claim (How can a pool of free computing resources be established in a computing system if they are not configured to communicate with the computing system?).

7. Claims 2, 4-14, 16, 18-21, 23-25 and 27-30 are rejected due to their dependence on the previously rejected claims.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-2, 4-16, 18-25, and 27-30 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Kaminsky et al (US Pub. No. 2004/0078622 A1),

hereafter “Kaminsky,” in view of Evans et al (US Pub. No. 2004/0039815),
hereafter “Evans.”

10. As to claim 1, Kaminsky discloses a computing resource management method
(Abstract) comprising:

establishing a pool of free computing resources in a computing system
([0026], lines 1-6 and [0023], lines 6-10, the server farm reads on “a pool of free
computing resources”, and the computing resources of the server farm are free in
the sense that the server is available, i.e. it is not currently executing anything);

selecting a free computing resource from said pool of free computing
resources to replace an operating computing resource in said computing system
([0033] a new server (free computing resource) is selected from the server farm
(pool of resources) to respond to request that was directed to the initially
assigned server (operating computing resource)); and

configuring said selected free computing resource to operate in said
computing system, after replacing said operating computing resource with said
free computing resource in said computing system ([0033], an available server is
assigned to replace the assigned server (operating computing resource), i.e. it is
configured to operate).

But, Kaminsky does not disclose that said free computing resources comprise
resources not preconfigured for use in said computing system.

However, Evans discloses a pool of free computing resources in a computing system ([0009], lines 13-15, resources in an idle group read on “free computing resources) and configuring said selected free computing resource to operate in said computing system ([0009], lines 4-15), wherein said free computing resources comprises resources that are not preconfigured for use in said computing system ([0024], lines 1-9, when a resource is assigned to a resource group it needs to be reconfigured, i.e. it was not preconfigured to operate for that specific application, in the example a web server).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Kaminsky and Evans in order to optimize the utilization of individual computing resources in a heterogeneous network (heterogeneous in respect to the applications they process) (Evans, [0008]).

11. As to claims 15 and 22, they are rejected by the same rationale set forth in claim 1's rejection.

12. As to claim 2, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selected free computing resource is configured to operate in accordance with a configuration of said

operating computing resource being replaced (Kaminsky, [0033], when the new server (free computing resource) is assigned it will inherently be configured to operate the same the initially assigned server (operating computing resource) it is replacing was, otherwise it would not be able to respond to the incoming requests and thereby would not be replacing initially assigned server).

13. As to claim 4, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selecting and configuring said free computing resource is initiated automatically upon a failure of said operating computing resource in said computing system (Kaminsky, [0018], lines 5-9 and [0029], lines 1-3, the retry request reads on "a failure").

14. As to claim 5, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selecting and configuring said free computing resource is initiated in response to an end-user request for a changed operating computing resource in said computing system (Kaminsky, [0018] and Fig. 2, lines 5-9, the client (an end-user) issues a retry request (request for a changed operating resource) to the sprayer which then selects and configures a new server (free computing resource)).

15. As to claim 6, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selecting and configuring of

said free computing resource is based on a usage plan for using said free resources in said free pool of computing resources (Kaminsky, [0033], lines 5-8).

16. As to claim 7, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said usage plan for using said free resources is implementable automatically in response to a failure of an operating computing resources in said computing system (Kaminsky, [0029], lines 1-3 and [0033], lines 5-8).

17. As to claim 8, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said selecting and configuring said free computing resource to replace said operating computing resource occurs transparently to end-users in said computing system (Kaminsky, Fig. 2, the client (end-user) is not directly aware due to the fact it has no way of seeing the internal communication of the server farm).

18. As to claim 9, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said computing system comprises a Utility Data Center (Kaminsky, Fig. 1, label 160, administration node is functionally equivalent to the claimed Utility Data Center).

19. As to claim 10, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said computing system comprises a computer network (Kaminsky, Fig. 1, label 130).

20. As to claim 11, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose monitoring said computing system to detect failed operating computing resources (Kaminsky, [0018], lines 5-9 and [0029], lines 1-3).

21. As to claim 12, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose relegating said failed operating computing resources to a pool of quarantined computing resources (Kaminsky, [0035], lines 1-5, by taking remedial measures and treating the failed servers differently this is in effect a quarantine).

22. As to claim 13, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose rehabilitating said failed operating computing resources for reprovisioning into said computing system (Kaminsky, [0035], lines 1-5).

23. As to claim 14, Kaminsky and Evans disclose the invention substantially with regards to the parent claim, and further disclose said computing resources

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comprise routers, servers, data storage systems and CPU's (Kaminsky, Fig. 1, labels 130 and 150).

24. As to claims 16 and 25, they are rejected by the same rationale set forth in claim 2's rejection.

25. As to claims 18, 24, and 27, they are rejected by the same rationale set forth in claim 4's rejection.

26. As to claims 19 and 28, they are rejected by the same rationale set forth in claim 5's rejection.

27. As to claims 20 and 29, they are rejected by the same rationale set forth in claim 8's rejection.

28. As to claims 21 and 30, they are rejected by the same rationale set forth in claim 6's rejection.

29. As to claim 23, it is rejected by the same rationale set forth in claim 11's rejection.

Conclusion

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.
31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2152

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/Bunjob Jaroenchonwanit/
Supervisory Patent Examiner, Art Unit 2152